

SOCIAL INFRASTRUCTURE AND ECONOMIC DEVELOPMENT- REGIONAL DISPARITIES.

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INTRODUCTION

Growth and equity are the twin objectives of any economy. Growth depends on the resource base, input use and infrastructure development. Besides physical infrastructure, social infrastructure is vitally important to the States' economic future. Strong social infrastructure is the foundation of the strong economy. For sustain economic growth, we need educated, healthy and secured people.

Human resource development is the most strategic and crucial determinant of growth. Abundant physical resources alone cannot generate growth unless requisite human capabilities to exploit them are generated. Alfred Marshall considered the investment in human beings as the most valuable of all capital. The socio-economic development is possible mainly with literacy as a major development indicator. Kuznets pointed out the economic development is possible with the development of skills and knowledge of people. Paul Streeten argues a case for better education, nutrition and health as they help to raise labour productivity, enhance people's adaptability and capacity for change create a suitable social and political environment for a stable government.

The total population in the South Pacific is approximately 7 million and consists of the following major countries: Papua New Guinea, Fiji, Samoa, Solomon Islands, Tonga, Vanuatu, Micronesia, Marshall Islands, and Kiribati. South Pacific island economies have a number of common features: all have small internal markets; all experience substantial transaction costs in accessing world markets; all are vulnerable to natural hazards and in varying degrees, to market-related hazards; and in all cases, structural conditions hinder the establishment of relatively competitive markets .But at the same time all these economies are diversified with social infrastructure. There are regional disparities regarding the development of education and health .Hence in this paper an attempt is made to analyse the regional disparities in the social infrastructure of South Pacific Islands.

Objective, Data Base and Limitations:

The objective of this paper is to analyse the Disparities in the Social Infrastructure of the people in different economies in South Pacific. To examine how the economies are classified according to (a) index of Human Development (b) Index of Gross national income (GNI) per capita PPP .The selected variables are:

1. Income: Per capita GNI Measured in PPP (US dollars)
2. Education: (a) Education Index; (b) Mean years of schooling (years);
3. Health: (a) Life expectancy at birth (years),(b) Infant mortality rate; and (c) Maternal mortality rate.

4. Human Development Index.

Data for the above variables are collected from the UNDP World Human Development Report 2014.

Limitations:

The limitation of this study is that data are not available for all the indicators for all South Pacific Islands. Hence ignoring the economies for which the data are not available for some indicators.

Methodology:

Since the publication of HDR in 1990, researchers made contributions to examine from different angles. Prior to UNDP'S HDI, Morris (1979) constructed a composite index of infant mortality rate, literacy and life expectancy and termed as Physical quality of life.

In this study Index of variable is defined as;

$$\text{Index of } X_i = \frac{\text{Actual value of } X_i - \text{Minimum value of } X_i}{\text{Maximum value of } X_i - \text{Minimum value of } X_i}$$

To examine how far the south pacific economies on the basis of income tally with that of index of human development and other variables are presented in the following tables. Data relating to the distribution of economies according to index of income and the index of human development are presented in Table-1.

TABLE 1: CLASSIFICATION OF ECONOMIES ACCORDING TO INDEX OF INCOME AND HUMAN DEVELOPMENT

Index of Income	Index of HD				
	< 0.250	0.251 - 0.500	0.501 - 0.750	0.751 & above	Total
<0.250		2	2		4
0.251 - 0.500			1		1
0.501 - 0.750			2		2
0.751 & above			1		1
Total	-	2	6		8

It can been seen from Table-1, four economies are grouped in very low income group. They are Vanuatu (0217), Kiribati (0216), PNG (0.183), and Solomon Islands (0.000). Out of four very low income economies, two are grouped as of moderately high human development. They are Vanuatu (0.616) and Kiribati (0.607). In Vanuatu it is due to high life expectancy rate (0.852) and Mean years of schooling (0.812). And in Kiribati it is due

to moderately high life expectancy rate (0.602) and Mean years of schooling (0.602).The other two very low income economies viz PNG and Solomon Islands belong to moderately low human development group viz. 0.419 respectively.

Further two economies are grouped as moderately in low income group. They are Micronesia (0.391) and Marshall Islands (0.484). Between these two economies Micronesia classified as the economy of moderately high human development group (0.630) and regarding Marshall Islands human development index data is not available. Further two economies are classified in moderately high income group. They are Tonga (0.674) and Samoa. (0.570), both economies belong to moderately high human development group viz. 0.705 and 0.694 respectively. Further one economy viz. Fiji belongs to very high income group (1.000) but it belongs to moderately high human development group (0.724)

This analysis shows that there is a positive correlation between the income and human development. It is interestingly note that two economies namely Vanuatu and Kiribati even they belong to very low income group but they belong to moderately high human development group.

TABLE 2: CLASSIFICATION OF ECONOMIES ACCORDING TO INDEX OF INCOME AND EDUCATION

Index of Income	Index of Education				
	< 0.250	0.251 - 0.500	0.501 - 0.750	0.751 & above	Total
<0.250		2	2		4
0.251 - 0.500			1		1
0.501 - 0.750			2		2
0.751 & above				1	1
Total	-	2	5	1	8

It can be seen from Table-2, that out of four very low income economies, two economies are grouped as moderately high education group. They are Vanuatu (0.596) and Kiribati(0.60 The remaining two economies belongs to moderately low education group. They are Solomon Islands (0.405) and PNG (0.376). Further among nine South Pacific Islands two economies belong to moderately low income group. They are Marshall Islands and Micronesia .Between these two Micronesia belongs to moderately high education group (0.611). Marshall Islands data is not available. Further two economies viz. Tonga and Samoa belong to moderately high income group. Both economies belong to moderately high education group viz. Tonga (0.720) and Samoa (0.702) respectively. Further one economy viz. Fiji belongs to very high income group and it is also belongs to very high education group. (0.767).

This analysis also shows that very high and moderately high income economies are also belong to the same in education index. But among very low income economies viz.

Vanuatu and Kiribati are better in education index than the other two economies viz. PNG and Solomon Islands.

TABLE 3: CLASSIFICATION OF ECONOMIES ACCORDING TO INDEX OF INCOME AND LIFE EXPECTANCY

Index of Income	Index of Life Expectancy				
	< 0.250	0.251 - 0.500	0.501 - 0.750	0.751 & above	Total
<0.250	1	1	1	1	4
0.251 - 0.500			1	1	2
0.501 - 0.750				2	2
0.751 & above			1		1
Total	1	1	3	4	9

In Table-3, it can be seen that out of four very low income economies, one economy viz, Vanuatu belongs to very high life expectancy group(0.852), Kiribati belongs to moderately high life expectancy group(0.602), Solomon Islands belongs to moderately low life expectancy group(0.491) and PNG belongs to very low life expectancy group. Further two economies belong to moderately low income group. They are Marshall Islands and Micronesia. Between these two Marshall Islands belong to very high life expectancy group (0.944) and Micronesia belongs to moderately high life expectancy group. Further two economies viz. Tonga and Samoa belong to moderately high income group and both belong to very high life expectancy group viz. Samoa (1.000) and Tonga (0.954) respectively. Further one economy, Fiji belong to very high income group but it belongs to moderately high life expectancy group.

This analysis shows that even Marshall Islands belongs to low income group but it belongs to very high life expectancy at birth group. And two economies viz, Tonga and Samoa even they belong to moderately high income group but both belong to very high life expectancy at birth group.

TABLE 4: CLASSIFICATION OF ECONOMIES ACCORDING TO INDEX OF MEAN YEARS OF SCHOOLING

Index of Income	Index of Mean years of Schooling				
	< 0.250	0.251 - 0.500	0.501 - 0.750	0.751 & above	Total
<0.250	2		1	1	4
0.251 - 0.500				2	2
0.501 - 0.750				1	1
0.751 & above				1	1
Total	2		1	5	8

It can be seen from the Table-4 that out of four very low income economies one economy viz. Vanuatu belongs to very high mean years of schooling group

(0.812), Kiribati belongs to moderately high mean years of schooling (0.638). Both Solomon Islands and PNG belong to very low mean years of schooling. Further, two economies belong to low income group. Both economies belong to very high mean years of schooling viz. Samoa (1.000) and Tonga (0.870) respectively. Further two economies belong to moderately high income group. They are Micronesia which belongs to very high mean years of schooling economy (0.783) and Marshall Islands data is not available. Further, Fiji which belongs to very high income economy and also belongs to very high mean years of schooling (0.942).

This analysis shows that even Vanuatu belongs to very low income group but it belongs to very high mean years of schooling group. And two economies namely Samoa and Tonga even they belong to low income group but they belong to very high mean years of schooling group.

TABLE 5: CLASSIFICATION OF ECONOMIES ACCORDING TO INDEX OF INFANT MORTALITY

Index of Income	Index of Infant Mortality				
	< 0.250	0.251 - 0.500	0.501 - 0.750	0.751 & above	Total
<0.250	2			2	4
0.251 - 0.500		2			2
0.501 - 0.750	1	1			2
0.751 & above	1				1
Total	4	3		2	9

It can be seen from the Table-5, that out of four very low income economies, two economies belong to very low infant mortality. They are Solomon Islands (0.205) and Vanuatu (0.220). But two economies belong to very high infant mortality rate. They are Kiribati (0.857) and PNG (1.000). Further two moderately low income economies belong to moderately low infant mortality rate. They are Micronesia (0.403) and Marshall Islands (0.385) respectively. Further, two economies belong to moderately high income group. Between these two Tonga belongs to very low infant mortality rate (0.076) and Samoa belongs to moderately low infant mortality rate (0.345). Further, one economy viz, Fiji which belongs to very high income group, belongs to very low infant mortality rate (0.000).

This analysis shows that two economies namely Solomon Islands and Vanuatu even they belong to very low income group but they belong to very low infant mortality rate. But two economies which belong to very low income group namely PNG and Kiribati but both belong to very high infant mortality rate.

TABLE 6: CLASSIFICATION OF ECONOMIES ACCORDING TO INDEX OF MATERNAL MORTALITY RATE

Index of Income	Index of Maternal Mortality Rate				
	< 0.250	0.251 - 0.500	0.501 - 0.750	0.751 & above	Total
<0.250	1	2		1	4
0.251 - 0.500		1			1
0.501 - 0.750		1			1
0.751 & above	1				1
Total	2	4		1	7

It can be seen from the Table-6, that out of four very low income economies one economy viz, Kiribati belongs to very low maternal mortality rate (0.000).Two economies belong to moderately low maternal mortality rate. They are Solomon Islands (0.380) and Vanuatu (0.457). But one economy viz, PNG which belong to very high maternal mortality rate (1.000).Further, two economies belong to moderately low income economies. Between these two Micronesia belongs to moderately low maternal rate (0.4112). But regarding Marshall Islands data is not available. Further, two economies belong to moderately high income group. Between the two Tonga belongs to moderately low maternal mortality rate (0.457) but regarding Samoa data is not available. Further one economy belong to very high income group Viz, Fiji. and belongs to very low maternal mortality rate (0.077)

This analysis shows that even Kiribati which belongs to very low income group but it belongs to very low maternal mortality rate group. And two very low income economies namely Vanuatu and Solomon Islands both belong to moderately low maternal mortality rate group.

With reference to PNG, it belongs to very low income group among south pacific islands. Regarding HDI, PNG belongs to moderately low human development group. But in human development variables, in case of life expectancy at birth and mean years of schooling PNG belongs to very low life expectancy and mean years of schooling group. .And regarding infant mortality rate and maternal mortality rate PNG belongs to very high infant mortality and maternal mortality rates.

Conclusions:

Human Development can be increased by effective support and participation of people, political will and commitment to implement the programs relating to health, hygiene and education. Many programs are social rather than economic wherein the spread effects will be more and media plays an important role. The success of these programs depend on the

degree of combination of individual and public actions coupled with the support of personal and social institutions Sustainable human development is possible only with the maintenance of good quality of life. This may involve restructuring the public expenditure. As a priority, focus may be shifted for human concern- education and health.

Recently PNG introduced free education and free health policies with the objective of improving human development. With the effective implementation of these two policies only PNG can improve its human development. PNG has a significant opportunity to have a sustainable human development with the commencement of the LNG project.